eBooks and Efficiencies in Acquisitions Expenditures and Workflows

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Introduction:

East Carolina University's Joyner Library acquires eBooks through several different methods, including packages, firm orders, and most recently, a Demand-Driven Acquisition (DDA) program. Because we expect our volume of eBook business to increase substantially in the next few years, we are interested in evaluating efficiencies in our acquisitions expenditures on eBooks, and the workflows each purchase type requires. Currently, each acquisition method requires a different workflow, raising the question of whether any transformation in workflows might further streamline operations. In order to assess the efficiencies of acquisitions dollars expended, we compare use of our eBooks by acquisition method, and set those briefly against the use of firm order print titles. The big picture rendered by these comparisons will influence how we focus our purchasing in the future, and any changes will directly impact workflows to support these changes. To make comparisons of eBook use, we examine the percent of titles used and the intensity of use, measured as the total number of uses of the books divided by the total number of books in the group studied. Future directions for purchasing and potential impacts on staffing and workflows are briefly explored.

Prior research regarding eBooks clusters around two relevant areas for us: usage and workflows. Notable publications include a special issue of *Collection Management*, **Swords'** *Patron-Driven Acquisitions*, and two special issues of *Against the Grain*.[1] Some articles on usage compare DDA eBooks to librarian-selected books, and **Hruska** indicates that her library will soon compare use of eBook packages to DDA titles.[2] Users' behavior, especially their electing to use eBooks versus print, is the subject of research by **Levine-Clark, Shelburne**, and recently **Cassidy, Martinez**, and **Shen**.[3] While research on user behaviors offers insight into the allocation of materials funds, we also want to look for efficiencies in expenditures by targeting the method of acquisition. Articles discussing eBook workflows often describe how to embark on a demand-driven acquisitions program, or how to tackle eBook cataloging. However, **Morris, Mays**, and most recently **Beisler** and **Kurt** discuss eBook workflows that include both acquisitions and cataloging.[4]

The (Continuing) Need for Caveats Regarding Usage Statistics:

We cannot accurately compare eBook usage from vendor to vendor because what they report is different, and because the reports are incomplete for some vendors. All the eBook vendors do have their own in-house reports, but as could be expected, they do not all measure the same activity and they do not define their terms the same way. There are reports conforming to Project COUNTER standards that should be somewhat comparable.[5] There are, however, at least two problems with these reports: First, according to COUNTER standards, vendors are only permitted to offer *either* Book Report 1 (BR1) or Book Report 2 (BR2). BR1 measures the number of "successful title requests by month and title" for books that are provided as a single file. BR2 measures the number of "successful section requests" by month and title, for books that can be provided in separate sections. BR1 and BR2 cannot be compared. The second concern is that vendors using BR2 can decide how to count a section. **ebrary** totals all successful page views, prints, and copies for its BR2 report. (A view is equivalent to a page.) Some of the BR2 providers also supply a Book Report 5 (BR5) which tallies total searches by month and title. BR5 is somewhat comparable to BR1, but we have in those cases preferred in-house reports, because they represent a longer time span and provide richer data sets with more variables of interest.

We must also state flatly that a circulation of a print book is not equivalent to an eBook session. However, it's the closest comparison we have. Library patrons may browse a print book to decide if it's relevant, may use it for brief periods of time and reshelve it, or may even make extensive use of a book at a study carrel without ever checking it out. And the circulation periods of print books vary from a month for undergraduates to a year for professors. Further, these long checkout periods make print books unavailable to other users for significant time periods. Uncounted use and unavailability of checked out books do not present corresponding limits for eBooks. Every exploration of the eBook is documented, and "checkout periods" don't withhold that content from other users for longer than seven days at a time. However, we do believe that we have to attempt some sort of comparison in order to determine the rate of eBook adoption by our users. This comparison can help us determine how much of our book selection should be driven by format. At a basic level, each book is used or not, and since the most basic level of comparison available seems to be user sessions per title, we will prefer COUNTER BR1 reports or in-house reports that get at user sessions for each title.

eBook Use by Acquisition Method:

Usage will be described by acquisition method, and then compared. Since we were most interested in the results of a pilot Demand-Driven Acquisition program, DDA use will be reported first, followed by use of firm order eBooks, and then a comparison between that use and firm order print books. To provide insight on whether our DDA pool might be subject to a "long-tail" phenomenon, a discussion on the use of eBook packages rounds out this section.

According to **ebrary** reports, our purchased DDA eBooks are receiving good use, but we might need to revise our profile, since we still have a large number without reported use.

- **Triggered Books:** As of October 17 (14 months after beginning a pilot program), 165 books have been triggered for a total cost of $15,865.59, averaging about $96 per book. Although they represent only 2.5% of the total pool of available books, the triggered titles average 108 total pages viewed. With 630 total sessions for all triggered books, we would say that these books have an intensity of use measuring 3.82. **The cost per user session is $25.18.**

- **Non-triggered Uses:** 322 other books (about 5% of the pool) have been used but not triggered for purchase. These books have had 415 total sessions (about one per book), with about eight pages used on average. This group definitely helps prove the value of the DDA project: if all these books had been purchased, the total cost to **Joyner** would be $30,193.61. **The cost per user session for non-triggered books would have been $72.76** – another indication of the value of this program.

- **Unused DDA Titles:** There remain 5,679 DDA records in our catalog for books that have so far been unused. What that means is that a little less than 8% of the titles available have had any use. Is this a problem? One recent study suggests that it may take a dozen years to gain the maximum use for print books.[6] Can we be patient that long? Should we? At some point in time we may want or need to remove the records for untriggered DDA titles from our catalog. We

should not rush to do so, and we should consider carefully the criteria which will guide our decisions when we do.

Based on the success of the pilot program, we have already expanded the profile for DDA eBooks, hoping to attract a larger pool of titles. One of the benefits of this expansion is that it should reduce the number of titles selectors have to consider for purchase decisions. Selectors can also review the subjects used and titles triggered to inform their firm order purchases. However, if the larger DDA pool does not generate an increase in the percent of titles used, we may need to refine the profile again in hopes of getting more targeted titles that are more likely to be used by researchers here. It will take two or three years, though, to be able to make this determination. There is a potential for increased work for acquisitions and cataloging, in the event that the expanded profile leads to more purchases; we must be prepared for the increase in workload.

The most immediate comparison for DDA purchases is firm order eBooks. The most recent three fiscal years (2010, 2011, and 2012) of firm order data are included, for orders placed with **YBP**, Joyner Library's primary book vendor. The companies providing those eBook firm orders were **ebrary**, **EBSCOhost**, **Gale**, and **Wiley-Blackwell**. **Gale** and **Wiley-Blackwell** titles are excluded because of the small number of eBook firm orders with **YBP**. Firm orders placed for **EBSCOhost** eBooks can only be compared to a certain degree for two reasons: first, **EBSCOhost** only provides BR1 reports beginning with January 2011. We are therefore missing eighteen months of activity for **EBSCOhost** eBooks compared to **ebrary**. Second, the usage reports aren't quite the same: **EBSCOhost** uses the BR1 report while **ebrary** provides BR2 and BR5 reports (so the usage counts a different activity). For **ebrary** firm orders, we decided to use their Title Report, which counts the number of times a user sessions opens a title and performs any action such as page turn, print, copy, or download.

The largest number of firm orders was placed with **ebrary**: 736. Of them, 617 (84%) have been used. The intensity of use is eye-catching: these 617 books have been accessed a total of 3,969 times between August 2009 and October 2012. Intensity of use for **ebrary's** books — that is, the total user sessions divided by total books available, is about 5.4, higher than what is reported for triggered DDA books. **The three-year average cost per user session for ebrary's firm order books is $20.09.** A direct comparison between **ebrary's** firm order and DDA eBooks shows that, while DDA gets off to a better start than the newest firm orders, the firm orders rapidly increase in total use and intensity of use. We hope that use of our DDA titles will follow such an arc.

ebrary Firm Order Use Compared to DDA:

Acquisition Type:	Fiscal Year:	Total User Sessions / Total Books:	Total Costs / Total User Sessions:
DDA Triggered	2012	3.82	$25.18
DDA Nontriggered	2012	1.29	$72.76*
DDA All Used	2012	2.15	$44.08*
Firm Order Ebook	2010	10.54	$10.63
Firm Order Ebook	2011	5.36	$16.91
Firm Order Ebook	2012	2.62	$48.63
Firm Order Ebook	3-year average	5.39	$20.09

' *The library was not charged for nontriggered uses; these book costs are factored in only for comparative purposes.

Firm orders for **EBSCOhost** eBooks totaled 90 titles, of which 39 (43%) have been used between January 2011 and October 2012. These books have an average of 3.5 uses each. **EBSCO eBooks have a cost per user session so far of about $49.91**, which is not much different than the initial year of our **ebrary** firm orders. Total uses divided by total number of **EBSCOhost** firm orders equals 1.52 — a figure that compares well with the print firm orders below, but is far below what we see with DDA or **ebrary** firm orders. It is unclear why **ebrary** firm orders out-perform firm orders from **EBSCO**; after all, when combined with the former **netLibrary** collections, **EBSCO** offers far more eBooks to our patrons than **ebrary**, and its interface is familiar to patrons because of other **EBSCO** databases we offer. For **ebrary** and **EBSCOhost** together, though, the firm order eBooks still demonstrate that patrons discover them faster than they discover our print firm orders, and use them to a greater extent. The chart below illustrates the relative use by format.

Percent of Firm Orders with Use: eBooks vs. Print Circulation:

Fiscal Year:	Total Ebook Titles:	Percent Ebook Titles Used:	Total Print Titles:	Percent Print with Circs:
FY2010	166	90%	3,914	48%
FY2011	356	90%	3,017	43%
FY2012	304	62%	3,687	23%

The faster discovery and increased usage compared to print books is especially visible from information in the charts above and below. We must treat the firm order eBooks use with a little caution since the pool is still small compared to our firm order print books. The information in these charts is only for firm order print books ordered from **YBP** over the most recent three fiscal years. Reference is excluded because most reference titles do not circulate. We have concerns about including the numbers for fiscal year 2012, because it is not clear how many of that year's titles were ordered early versus late — so we cannot know how much time patrons may have been able to discover and check out these books. The percentage of print titles that have circulated approaches what we have seen in the past for **Joyner's** print books acquired. Since this number is lower than we would like, we have tried and will continue to try multiple ways of involving faculty in order to improve our success rate. Also, we understand that the total cost per circulation will never be as low as the total cost per user session of electronic books, but we *do* want to see patron transactional costs going down through time, no matter the format.

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written on a "word processor" was **Len Deighton's** *Bomber*. That was in 1968 and the machine was a 200-pound IBM MT/ST (magnetic tape selectric typewriter). Apparently, **Deighton's** assistant had to keep retyping the manuscript and got tired of it! I remember I had the same reaction. I bought my first word processor in 1981, a clunky old Macintosh, because I had already typed a 600-page manuscript three times and I was against typing it a fourth time!

http://www.slate.com/articles/arts/books/2013/03/len_deighton_s_bomber_the_first_book_ever_written_on_a_word_processor.single.html

Some news about **journals** for a minute. **Ringgold Inc** (*www.ringgold.com*) has announced the publication of its new subject taxonomy, **Ringgold Subjects** that is being considered for adoption by **COUNTER** for use in classifying journals for the **Journal Usage Factor (JUF)**. For further information, contact <info@ringgold.com>.

http://www.projectcounter.org/usage_factor.html

http://www.projectcounter.org/documents/Draft_UF_R1.pdf
http://www.ringgold.com/pages/subjects.html.

In fact, did I tell y'all about **Myer Kutz**? We interviewed **Myer** in v.1#4, p.5 of *Against the Grain*. I remember that **Audrey Melkin** (then at **Wiley**) put us in touch! **Myer** was talking briefly about **publisher backlists** (and *ATG* was only 40 pages!)! Anyway, we have reconnected! **Myer** and his wife have a place at Kiawah that they visit during the year. **Myer** is working as a consultant after many years at **Wiley**. Anyway, **Myer** has written a fantastic

<http://www.against-the-grain.com>

Intensity of Print Firm Order Use:

Fiscal Year:	Total titles:	Total Circs:	Total Circs / Total Books	Average Cost per Circ:
FY2010:	3,914	5,141	1.31	$ 42.07
FY2011:	3,017	2,866	0.95	$ 55.75
FY2012:	3,687	1,287	0.35	$ 140.47

Only a small percentage of the titles in the DDA pool have been used, prompting a question about how the DDA pool might compare to eBook packages. The library purchases four collections that were used for comparative purposes: two STEM collections from **Springer**, the Life Sciences eBook collection from **Elsevier**, and the **ACLS** Humanities E-Book Collection. Although the Humanities E-Book Collection is a subscription rather than a purchase, we include it so that collectively these eBook packages represent a range of subject areas. Usage is not as good as we hope for our two **Springer** eBook collections and for the **ACLS** Humanities package — only 4 to 5% of the available titles have had any use (compared to 8% of the available DDA eBooks). The **Elsevier** Life Sciences collection had 10 and 11% of its titles used in 2010 and 2011, dipping to 7.5% for the first ten months of 2012. The intensity of use between our eBook packages cannot be compared because the vendors provide different COUNTER reports and there are no directly comparable in-house reports. Backfile purchases for our **Springer** and **Elsevier** collections have increased their value to our collections, but may have a negative impact on reviewing percent of titles viewed or the uses per title.

Comparing DDA Total Pool with Ebook Packages: Percentage of Titles with Use*

Acquisition Type:	Highest Yearly Titles Available:	FY2010 Use	FY2011 Use	FY2012 Use	Average Use
ACLS Humanities	3,750	4.3%	5%	5%	4.8%
DDA	6,166	NA	NA	7.9%	7.9%
Springer Package 1	9,258	4.0%	4.1%	5.1%	4.4%
Springer Package 2	4,681	2.2%	2.8%	9.7%	4.9%
Elsevier Package	4,633	10%	11%	7.5%	9.6%

*Average of last three fiscal years purchases, usage end date of October 2012

The most direct application of these use reports is to see whether eBook packages compare well with our DDA pool on a potential "long tail" use effect. The pattern is there — a small number of high-use titles followed by a much greater number of low-use titles. We just wish that the total percent of titles used were higher — that is, we hope the long tail actually grows! While we cannot predict whether the percentage of titles used from our DDA pool will increase, we can tweak the profile in an attempt to make that happen. This represents one of two major advantages for DDA over the eBook packages. The other advantage is that we pay only for books purchased, rather than buying the whole package. **ECU** will, like **UC San Diego**, continue to assess eBook packages to determine whether a DDA plan might be more efficient.[7]

Implications for Future Purchasing and Workflows:

Overarching patterns suggest, not surprisingly, that eBook adoption and use are radically outpacing the discovery and circulation of our print books. **Joyner's** current mix of DDA, firm orders, and packages has benefits in providing a wide range of content at a generally reasonable cost. Of these three acquisition types, DDA is the most cost-effective in that it incurs costs only for use and generates a reasonably good intensity of use. Although the firm order eBooks perform well in terms of intensity of use, the most important figure about them is that 90% of them have been used by year three — a percent of use far above our print purchases or any other type of eBook acquisition. eBooks in packages are underutilized per title, but can still be considered good investments in terms of cost per use. Ultimately, **Joyner Library** will limit future eBook packages in preference for DDA and firm orders. Selectors should increase the percentage of their firm order budgets devoted to eBooks as usage leads to adoption. The library will continue to offer DDA to catch the books selectors miss, especially in interdisciplinary and cross-campus research areas.

Like many other academic libraries, **Joyner Library** has experienced the loss of some technical services positions, and the need to transform the duties of other technical services positions. eBook workflows have been designed to take advantage of vendor tools, services, and reports, as well as staff strengths. The documentation for each workflow is in a shared location and revised as needed. eBook firm orders have been placed by all acquisitions staff members, received and invoiced by one point person using a vendor report, then cataloged by another point person. DDA orders are handled by one point person each from monographic acquisitions and cataloging, while eBook packages have been acquired by the electronic resources and serials unit. eBook standing orders have been treated generally like packages. MARC records for packages come from a third-party provider. We use an internal email list to receive vendor reports, to prompt next steps in the workflow, and to notify each other of questions and their resolutions. Another strategy that we have employed is that acquisitions and cataloging point people for eBooks have identified backups in advance to cover if they are out of the office, in an attempt to meet user expectations for timely processing of eBooks. Keys to success for workflows include planning, communicating clearly, having backups, and revisiting the workflows periodically to adjust them.

eBooks will transform monographic acquisitions just as radically as ejournals transformed serials, though perhaps not as swiftly. Because we believe eBook changes will proceed at a measured pace, we believe that we should integrate eBooks fully into existing staff members' duties rather than try to create a separate eBooks unit. Our own staffing and workflow planning are further complicated by upcoming projects to launch print DDA and an e-preferred approval plan. How much will the workflows for these be similar to workflows for eBook DDA, eBook firm orders, or print approvals? At a minimum, these workflows should be parallel, and acquisitions, cataloging, and electronic resources will collaborate ever more closely. Hiring, training, and retraining personnel constitute one of the top ten concerns for academic libraries in 2012.[8] Technical services is by no means exempt, especially considering the rapid changes in the types of materials we must acquire and describe, and the variety of means to do so. 🌰

Endnotes

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